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BIOLOGICAL EVALUATION OF WHITE ROCK PICNIC AREA, SANTA BARBARA RANGER DISTRICT, LOS PADRES NATIONAL FOREST

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ABSTRACT

A brief visit to White Rock Picnic Area is described. Defects in live oaks, the dominant vegetation, sycamore anthracnose and true mistletoe were the problems observed. Damage or injury from insects were not found. A general approach to hazard reduction is discussed.

INTRODUCTION

During the afternoon of May 24, we accompanied Dave Schreiner, silviculturist on the Los Padres National Forest, and John Bridgewater, Santa Barbara Ranger District, to the White Rock Picnic Area for a brief tour to evaluate pest problems.

OBSERVATIONS

White Rock is a newly refurbished picnic area of intermediate size within the Santa Ynez Recreation Area. Its location on the south bank of the Santa Ynez River and close proximity to large population centers assure a high level of use. Vegetation is characteristic of the Coastal Canyon type of the Southern Oak Woodland. Live oaks (Quercus agrifolia) predominate, but there are other oak species, numerous sycamores and a few conifers, some of which are exotic. Exotic hardwoods such as black locust and eucalyptus remain from past residential use of the site. Shrub vegetation is sparse, and grasses compose the low vegetation.

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Many oaks are large and often exhibit numerous bole and branch scars and holes indicative of decay. Twig dieback occurs on those oaks impacted by new construction. True mistletoe infections are common in the oaks and sycamores, but not so abundant as to be causing dieback and mortality. Witches' brooms are common in the sycamores -- the result of chronic infections and dieback from sycamore anthracnose and the subsequent development of a cluster of twigs around a common point.

DISCUSSION

Because the picnic area was upgraded during the winter, use patterns were not established prior to opening for the Memorial Day weekend. Once these have been established, the high frequency of limb and trunk rot in the oaks and sycamores will require a hazard evaluation of trees in the picnic area. Each tree should be inspected and a judgement made of its structural soundness. Some of the large sweeping limbs may need removal or some form of bracing. The planting of replacements in anticipation of tree removal may be necessary. Decisions on retention and removal may run counter to the native plant philosophy and require the retention of some exotics for shade. Fast growing exotics could fill the interim between removal and replacement by the more slowly growing natives. Removal of true mistletoe infections would be beneficial should these seem to be reducing tree vigor.

The abundance of symptoms and signs of anthracnose infections indicates that temperatures in the spring are almost annually favorable for disease development. In spite of this, the sycamores have reached large size. Manipulation of the vegetation can be utilized to alter the severity of the disease or frequency of injury. Anthracnose disease of sycamores can be prevented or reduced by substituting London plane, a species resistant to anthracnose, for the more susceptible sycamores.

MANAGEMENT ALTERNATIVES

1. NO ACTION. Vegetation management for the long-term benefit of the picnic area would not be accomplished. There is a potential for property damage or human injury when hazardous trees fail.

2. VEGETATION MANAGEMENT. This alternative requires the development of a vegetation management plan. This in turn requires the establishment of objectives for the area, which would include the desired future condition and appearance of the vegetation. Vegetation management is a long-term commitment and cannot be accomplished through one-time events. Topics to be considered include species composition, stocking levels, screening species, durability, regeneration and pest management actions[1].

PEST-SPECIFIC MANAGEMENT ACTIONS

1. Annosus Root Disease. There are few conifers in the picnic area and no sign of infection by Heterobasidion annosum (Fomes annosus). Should any pines

be removed, the stumps should be treated with borax (sodium tetraborate decahydrate, EPA

Reg. No 1624-94) to prevent infection by the fungus. Annosus root disease can be very disruptive to management plans.

2. True Mistletoe. True mistletoes can be removed from hardwoods by pruning the infected branch below the infection. This will improve the vigor of heavily infected trees by removing these "water parasites". Trees with numerous infections might be disfigured if a large number of plants were removed in this manner.

Another approach is to remove the mistletoe plant flush with the branch and wrap the point of infection with black polyethylene to exclude light. Without light, the mistletoe may die within a year or two. Removing mistletoe plants without wrapping will retard mistletoe development, but new shoots will appear after each removal.

3. Hazard Tree Management[1]. A hazardous tree management program initiated in the picnic area would have the objective of reducing the number of tree hazards to an acceptable level, thereby reducing the probability of property damage and risk to public safety. Such a program would require an initial inspection to determine the locations of hazardous trees and to prescribe any actions necessary for hazard reduction. In most cases, this would be tree removal, but other measures, such as topping, pruning, bracing, and relocating improvements, may be appropriate depending on the specific situation. This inspection and any actions taken should be documented.

Once initiated in the area, a hazardous tree management program should be a continuous process with periodic re-inspections and subsequent actions, when necessary. These activities should be documented, both for legal purposes and for determining if changes in hazard are occurring in individual trees.

The results of a hazardous tree management program on the vegetative characteristics in the picnic area will depend on the levels of hazard deemed acceptable and the intensity of activity undertaken. An active program in many areas can result in a substantial loss of tree cover because of the number of hazardous trees. A greater vegetative component could be retained, at least for the short-term, by being conservative in selecting trees for removal for hazard reduction.

1. DeNitto, G., J. Kliejunas, B. Roettgering, and D. Schultz. 1988. Biological Evaluation of Pest Conditions in Developed Recreation Sites, Whiskeytown Unit, Whiskeytown-Shasta-Trinity National Recreation Area. USDA - Forest Serv., Pac. SW Reg., St. & Priv. Forestry, Forest Pest Mgt. Rept. No. 88-10. 19 p.